

**Report on Historical and Archaeological Resources
Idaho Power Company Draft License Application
for the Hells Canyon Complex**

Exhibit E.4

Mary Oman
Archeologist
Baker Resource Area
November, 2002

1. INTRODUCTION

The exhibit is the required report summarizing the results of technical reports and evaluations, with proposed PM&Es. It overlaps considerably with the Cultural Resource Management Plan (CRMP), but does not include such elements as the standard procedures and decision flow diagrams in the CRMP.

2. CONCLUSIONS and RECOMMENDATIONS

p. E.4-1: "...three separate APEs were established. The first of these APEs includes the three reservoirs, the second includes the unimpounded reach of the Snake River...., and the third includes the transmission lines. These three APEs are described in the following paragraphs...." . Descriptions follow for these three APEs.

BLM does not agree with the geographic area of the "three APEs" established by the Applicant. The area of potential effect (36 CFR 800.16) is "the geographic area or areas within which an undertaking may directly or indirectly cause changes in the character or use of historic properties". Exhibit E.4 provides no clear geographic description of the APE for traditional cultural properties. The APE for the three reservoirs does not fully take into account the potential area directly or indirectly affected. It does not include all areas affected by dispersed recreation which originates with use of the reservoirs. It appears to BLM that the dispersed site recreation inventory did not capture all dispersed site locations and ignored locations such as hiking trails. Dispersed recreation areas include informal camping and day use locations, off-road vehicle use areas, and hiking trails that extend up to 1/4 mile up lateral side drainages along the Brownlee and Hells Canyon Reservoirs. In some places, the transmission line APE excludes segments of service and access roads used to reach the transmission lines. Exhibit E.4 provides no clear geographic description of the APE for traditional cultural properties.

BLM also disagrees with the APE boundary terminating at the confluence of the Salmon and Snake Rivers. The APE should include the reach of the Snake River downstream from Hells Canyon Dam to Captain John Creek, below the mouth of the Salmon River. BLM believes that sediment removed from the Snake River by the reservoirs results in increased erosion to archaeological sites in National Register Districts in both Idaho and Washington, on the reach of the Snake River to Captain John Creek. Water level

fluctuations associated with dam releases also have potential effect on archaeological sites in the Snake River and Nez Perce National Register Archaeological Districts downstream of the Salmon River. An assessment of these effects is needed. Sites in Idaho and Washington along this reach of the free-flowing Snake need to be included in monitoring and stabilization efforts. The APE for the three reservoirs does not take into account the actual area directly or indirectly affected by dispersed recreation which originates with use of the reservoirs. Dispersed recreation areas include informal camping and day use locations, off-road vehicle use areas, and hiking trails that extend up to 1/4 mile up lateral side drainages along the Brownlee and Hells Canyon Reservoirs.

p. E.4-2: "As mentioned earlier, the FCP was distributed in January 1997. Although there was an opportunity for comment provided, no comments were received concerning the three APEs."

It is correct that BLM did not originally provide comments in response to the Formal Consultation Package in 1997. However, following a December 1999 Cultural Resources Workgroup meeting in Pocatello, Idaho - when Idaho Power representatives indicated they would accept comments on the study plans from workgroup members - BLM submitted comments with recommendations, pointing out problems and asking for clarification of the APE, by letter to Idaho Power on March 7, 2000.

p. E. 4-4: "Northwest Archaeological Associates conducted the inventory of the Brownlee Reservoir margin and draw down areas (Technical Report E.4-3).

BLM questions whether or not all draw down areas with potential for cultural resources were inventoried along Brownlee Reservoir and the Powder River arm of Brownlee Reservoir. Since draw down inventories were conducted opportunistically, there may be areas exposed that have not been previously surveyed. As part of the cultural resource management program, Applicant should plan for and conduct systematic, ongoing inventories of draw down areas, using a design adaptive to changing conditions, until all areas exposed during such events have been examined. In addition, there are daily fluctuations along Hells Canyon Reservoir, which expose additional shoreline near known archaeological sites.

p. E.4-5 through E. 4-6: "Because the Applicant proposes to treat sites that are potentially eligible as though they were eligible, all protection, mitigation, and enhancement (PM&E) projects associated with eligible sites, including monitoring, would cover these sites as well."

Applicant should complete the studies needed to firmly establish eligibility of the potentially eligible sites. For most "potentially eligible" sites, the only immediate action proposed is monitoring. If the characteristics that make a site eligible have not been sufficiently identified, it is not clear how applicant can be informed enough to monitor for changes that would affect eligibility. If either integrity or significance is undetermined

or in question, these questions should be resolved through a systematic program of eligibility determinations.

P. E.4-5 "In addition, the Applicant agrees with the evaluation that site HC-17/35 BA 894 is ineligible because it lacks integrity."

BLM does not believe that enough information has been provided about integrity to establish that the site is ineligible. When the site was originally recorded, road construction and dispersed recreation impacts were among the observed impacts. Since that time no additional road construction has occurred. Dispersed recreation and off-road vehicle travel and parking has continued, possibly affecting site visibility and/or integrity, as suspected. The site may be shallow, but the site record indicates this is "undetermined". Whether or not these impacts are superficial, or if there is any potential for cultural deposits, should be more firmly established. Until then, BLM will consider the site to be potentially eligible.

p. E.4-8: Historical and Archaeological Sites Affected by Transmission Lines and Associated Service Roads

BLM does not agree with all eligibility evaluations made by the Applicant. Please see comments on the Transmission Line 903 study.

p. E.4-9 through 4-10: "Definition of Adverse Effects: Project-related impacts to sites eligible for inclusion on the National Register constitute adverse effects. *In this section, the Applicant describes impacts and assesses adverse effects.* The Applicant will consult with the Idaho and Oregon SHPOs and with Native American tribes regarding its assessment of adverse effects, pursuant to implementing the regulations of the National Historic Preservation Act.....These adverse effects are only defined for sites that are listed or eligible for listing on the National Register. Under 36 CFR 800.5(a)(2)(i), physical destruction of or damage to all or part of a property is an adverse effect. Therefore, the listed impacts constitute adverse effects because they have resulted in or could result in partial or total destruction of the sites.... Impacts from project operations could be related to recreation and access, as well as to pool fluctuations and cutbank erosion."

Following this narrative is a list of impacts to sites in Brownlee, Oxbow,. and Hells Canyon Reservoir (p. 4-10).

Although the kind of impacts are described, BLM could not find on page 4-10 where the Applicant assessed adverse effects on the eligible and potentially eligible archaeological sites on Brownlee, Oxbow, and Hells Canyon reservoirs. In contrast, Applicant provides an extensive discussion of effects characterized as adverse below Hells Canyon Dam. Applicant has summarized collected data without drawing conclusions based on effects of project operations. To clarify, applicant should provide the assessment of adverse effects based on impacts observed by consulting archaeologists.

Reservoir pool fluctuations and reservoir erosion are having adverse effects on archaeological sites. Other project related impacts that can have adverse effects include

various recreation activities (eg., camp site preparation, poor sanitation behavior, driving off road, pedestrian trails, building fires, removing vegetation, digging), vandalism and looting, proliferation of non-native annual vegetation, and new development. Fully comprehending the array of impacts is important to develop effective monitoring protocols and physical and administrative measures for cultural resource protection.

E.4.1.3.3: "Operational Impacts to Sites Along Transmission Lines and Associated Service Roads"

BLM agrees that risks and potential adverse effects need to be considered in the assessment of adverse effects to sites (E.4-24-25).

E.4.2.2.1: "Archaeological Inventory Methods for Locating Sites"

Response: *BLM agrees that the areas inventoried on the ground at 15-30 meter transect intervals constitutes thorough inventory of those specific locations. However, at some locations, the surveyors remarked upon limited visibility conditions. Since such conditions can change over a short period of time (for example after a wildfire) and certainly can change during the term of the license, as part of the cultural resource management plan the Applicant should plan to conduct periodic re-inventory of areas that had poor visibility. In addition, no clear rationale is provided in the reports for why the inventory corridor width is limited to 0.1 mile along the three reservoirs. No reason is given why this seems to be considered the area of potential effect, or why the inventory should not have been widened to include all adjacent areas potentially impacted by recreation use.*

The discussion should acknowledge that "reconnaissance" as described in the technical reports was a remote method using field glasses for much of the Brownlee and Hells Canyon Reservoirs. BLM is not convinced that the "reconnaissance" approach as described constituted an adequate inventory. Not all side drainages or project impact areas were examined on the ground. As one example, it appears that the hiking trail from Copper Creek to McGraw Creek along Hells Canyon Reservoir was not inventoried on the ground, but rather by reconnaissance. Please clarify if the draw down zone was inventoried at 30 or 15 meter transect intervals. Also BLM does not believe that all areas with slopes less than 30 percent were intensively surveyed along the three reservoirs, or that slopes exceeding 30 percent should have been entirely excluded from the inventory sample.

E.4.2.2.4 "Traditional Cultural Properties and Archival and Oral History Studies"

Response: *BLM considers the evaluation of potential effects to traditional cultural properties and sacred sites to be incomplete. One study underway with the Nez Perce Tribe has not been completed. Applicant has not stated whether or not traditional cultural properties as described in the Confederated Tribes of the Umatilla Indian Reservation technical report or the CTWS report are eligible or potentially eligible for*

the National Register. BLM questions why a study with the Nez Perce Joseph band at the Confederated Tribes of the Colville Reservation has not been included anywhere in the Applicant's draft license application. BLM believes that such a study with the Joseph Band Nez Perce is needed.

If studies with the Shoshone-Bannock and Shoshone-Paiute cannot be completed by the Applicant, then FERC may need to conduct government-to-government consultation with those tribes to identify potential effects to TCPs or sacred sites.

p. E.4-27: "That being the case, the extensive archival study sponsored by the Applicant identified no traditional cultural properties in the project area that were eligible for inclusion on the National Register."

Applicant has correctly cited one conclusion drawn in Myers' archival study technical report, which did not identify any potential traditional cultural property and therefore did not assess eligibility. However, the author of the archival study recommended further investigations; and it appears that the technical reports contain information which may indicate potential traditional cultural properties (BLM comments on the Technical Report E.4-12). In Appendix E.4-G (p. E.4-143) Applicant suggests two sites may be eligible TCPs. Applicant should conduct additional studies, or consult with Tribes, to establish whether or not these are National Register-eligible traditional cultural properties.

E.4.2.4.1: "Because the Applicant proposes no changes in operations, monitoring efforts described below are designed to reveal whether ongoing operations are damaging archaeological sites...."

Site forms, survey reports, and observations already show that ongoing operations, reservoir pool fluctuations and shoreline erosion are currently damaging specific archaeological sites, where cultural deposits and artifacts are eroding into the reservoir. In these instances, it would not be necessary to further monitor for these effects. Rather it is important to promptly take action to mitigate the impacts.

E.4.2.4.2: "Because the Applicant plans no new development of hydroelectric facilities, no salvage measures are proposed. However, several earth-disturbing activities may occur in connection with development of recreational sites. These activities will be monitored by qualified archaeologists and appropriate actions will be taken if cultural significant materials are encountered...."

It is not clear why salvage measures would only be connected with new development of hydroelectric facilities. Also it is not clear why earth disturbing activities are only associated with "development of recreation sites". Ground disturbance also occurs at dispersed recreation locations that may have no planned development. Ground disturbance is typical where vehicles travel off-road; where once primitive roads are maintained for access to project facilities; and where new transmission lines or facility communication lines are installed.

E.4.2.5.1.1 Monitoring of Eligible Sites along Transmission Lines

p. E 4-30: "Based on the current state of knowledge about resources and conditions, as many as 120 sites eligible for inclusion on the National Register may require monitoring. The monitoring plan would be set up for a six-year cycle. Therefore, each site would be visited five times over the license period."

BLM agrees in principle that monitoring of eligible and potentially eligible sites is a necessary and useful measure for some sites, but Applicant has not provided criteria for prioritizing sites or quantifying impacts. The specifics of the plan and schedule need to be more fully developed, including specifying limits for acceptable change and evidence for adverse effects that would trigger data recovery, stabilization or other protective measures. A six year interval monitoring schedule is adequate for transmission lines, since these areas (in Oregon) do not have the higher levels of erosion and recreation use associated with the reservoirs.

p. E.4-30: "At the end of the first six-year cycle and before the second cycle, all parties involved....would evaluate the procedures, list of sites, and monitoring plan for the next six year cycle."

Response: BLM does not agree that this schedule is adequate. BLM recommends Applicant should not postpone the first review of the monitoring plan until after the first six year cycle. A more detailed monitoring plan (schedule, priorities, permit requirements, professional qualifications of supervisory personnel, replicable methods/procedures, data to be recorded, quantifiable techniques, measures for limits of acceptable change, provisions for revision to the plan, and report requirements) needs to be mutually developed and agreed upon between the Applicant and BLM before the monitoring program is implemented, not after the first six years have passed. Then, the procedures and monitoring plan can be reviewed and evaluated by all parties for the next cycle.

Monitoring should be conducted and reported under the supervision of a professional archaeologist. Applicant and BLM should cooperate to involve BLM federal and Oregon-Idaho state law enforcement personnel in the monitoring plan and its implementation. BLM recommends that support for additional law enforcement patrols during peak use weekends would facilitate protection of cultural resources.

p. E.4-31: "Agencies with jurisdiction or private landowners may also be included." (emphasis added).

This statement should be revised to indicate that land managing agencies with jurisdiction will be included in the monitoring program, and will collaborate with Applicant to establish priorities, consult on monitoring results and proposed remedies for effects.

E.4.2.5.1.3 Monitoring of Known Eligible Sites on Oxbow and Hells Canyon Reservoirs

E.4.2.5.1.4 Monitoring of Known Eligible Sites on Brownlee Reservoir

BLM agrees in principle that monitoring of eligible and potentially eligible sites is a necessary and useful measure that serves as one aspect of a program for adaptive management. However, the monitoring program is overly general, techniques need to be better defined, replicable and quantitative in order to measure change and loss. Applicant has not provided criteria for prioritizing sites or quantifying measures of impacts. The specifics of the plan and schedule need to be more fully developed, including specifying limits for acceptable change and better methods for recognizing adverse effects that would trigger data recovery, stabilization or other protective measures.

BLM does not agree that a six year monitoring schedule is adequate for archaeological sites on the three reservoirs - Oxbow, Hells Canyon, and Brownlee. Applicant should sponsor a program of annual monitoring of Oregon sites on the three reservoirs for the first three years, and then re-prioritize; or continue annual monitoring until other protection and mitigation measures have been designed and scheduled for implementation.

pp. E.4-35, E. 4-38-39: "At the end of the first six-year cycle and before the second cycle, all parties involved....would evaluate the procedures, list of sites, and monitoring plan for the next six year cycle."

BLM does not agree that this schedule is adequate. BLM recommends Applicant should not postpone the first review of the monitoring plan until after the first six year cycle. A more detailed monitoring plan (schedule, priorities, permit requirements, professional qualifications of supervisory personnel, replicable methods/procedures, data to be recorded, quantifiable techniques, measures for limits of acceptable change, provisions for revision to the plan, and report requirements) needs to be mutually developed and agreed upon between the Applicant and BLM before the monitoring program is implemented, not after the first six years have passed. Then, the procedures and monitoring plan can be reviewed and evaluated by all parties for the next cycle.

Monitoring should be conducted and reported under the supervision of a professional archaeologist. Applicant and BLM should cooperate to involve BLM federal and Oregon-Idaho state law enforcement personnel in the monitoring plan and its implementation. BLM recommends that support for additional law enforcement patrols during peak use weekends would facilitate protection of cultural resources.

p. E4-35: "Based on the current state of knowledge about resources and their conditions, three sites on Oxbow Reservoir.....and nine sites on Hells Canyon Reservoir....would each be visited five times over the license period....."

P. E.4-38: "Based on the current state of knowledge about resources and their conditions, 22 sites on Brownlee Reservoir would each be visited five times over the license period, using a six year cycle....."

BLM recommends that Applicant should sponsor annual monitoring until protection, stabilization or mitigation plans are implemented.

p. E4-35, E.4-39: "Monitors would be looking for the causes of site impacts, especially those related to erosion. For example, the Applicant would try to distinguish between erosion that is related to project operations, and erosion that is related to boat wakes or wind action."

BLM agrees that monitoring should examine sites for causes of impacts related to erosion and other sources of condition deterioration. However, it should not be necessary to distinguish between erosion related to "project operations", "boat wakes" or "wind action" on the reservoirs, since all these impacts (erosion, siltation, and deflation) are ongoing effects caused by the project's unnatural large reservoir body of water. On the other hand, for example, it is important to distinguish project related impacts from natural event erosion or deposition on a site (eg., side drainage flood blowouts), or from trailing associated with recreation use.

p. E.4-35: "Monitoring techniques and intervals will be designed to serve as data collection for study 8.4.7.....In consultation with the Cultural Resources Work Group, the study was deferred until the implementation of archaeological site monitoring efforts."

Inventory and recent monitoring results already provide evidence that reservoir level fluctuations are adversely affecting archeological sites on the Oxbow and Hells Canyon Reservoirs.

p. E.4-38, 4-39: "Monitoring....is necessary at these sites to determine whether the Applicant's operations are causing impacts and whether such impacts are endangering their National Register qualities. Monitoring is also necessary to determine whether mitigation measures, such as data recovery, are necessary."

BLM agrees that monitoring helps identify what mitigation measures, or combination of measures, would be appropriate on a site by site basis to reduce or eliminate ongoing or new adverse effects. For example, if dispersed recreation use is affecting an archaeological site, then administrative and physical control measures (eg., fencing) would help control these impacts and facilitate in-place preservation. Eligible or potentially eligible properties in the drawdown or shoreline erosion zone are already deteriorating, and without further monitoring it should be possible to determine more immediately whether stabilization is feasible or data recovery is necessary.

Care must be taken to ensure that long term monitoring does not become a substitute for taking prompt action to evaluate and protect these resources. BLM agrees that while monitoring, Applicant should be looking for shoreline erosion where it might affect

previously unrecorded sites and checking for impacts on sites not specifically scheduled for monitoring.

E.4.2.5.1.5: Monitoring of Known Eligible Sites below Hells Canyon Dam (pp E.4-41 through E.4-43)

BLM questions what is so different about either the quality of the monitoring program or the costs of monitoring between the three reservoirs and the area below Hells Canyon Dam. Applicant's costs for "assisting" in monitoring "about four sites" per year below Hells Canyon Dam are displayed as funded at \$41,600 per year (p. E.4-43) compared to significantly lower funds for monitoring "three to four sites per year" along Brownlee Reservoir at \$2700 per year. Please explain why "assisting" in monitoring below Hells Canyon Dam is funded 15 times greater than monitoring in the Brownlee reservoir impact area. It appears that one part of the proposed monitoring program is over funded, while another would be significantly under funded. Would the quality of the monitoring effort be the same?

E.4.2.5.1.6: Implementation of Aspects of the Cultural Resource Management Plan Not Associated with Monitoring (pp E4-44 through E4-47). "The draft Cultural Resource Management Plan (CRMP) for the Hells Canyon Complex is submitted with this license application as Technical Report E.4-15. The CRMP applies to National Register quality cultural resources and traditional cultural resources that may not be eligible.....Managing the CRMP is an effort in itself. Under the terms of a Programmatic Agreement (PA) in effect over the term of the new license, FERC, tribal, agency, and public consultation will assist the Applicant in refining the CRMP as the need arises."

This is the first time BLM has seen this proposed CRMP. Prior to accepting or implementing this CRMP, a Programmatic Agreement first should be executed specifying that BLM and Applicant together will develop a mutually agreed upon revised CRMP for managing cultural resources and consulting with SHPOs and Tribes.

Among topics that need to be addressed in further detail are: inventory of previously unsurveyed areas; criteria for adapting future inventory to changes in project operations and land use; time frames and procedures for review of operation, maintenance and construction activities; NEPA planning for physical and administrative protection measures; procedures leading to final determinations of eligibility for all properties; provisions for reporting and data sharing; provisions for maintaining confidentiality of site location data; provisions for curation of material remains and records; etc. The CRMP provides some guidance on roles and responsibilities (Appendix 4.3-a), but there is some ambiguity in the document with respect to agency and Applicant roles. A Programmatic Agreement should be completed, and this PA should specify that the agencies and Applicant would work together to craft a more thorough revised CRMP before any implementation.

E.4.2.5.2.2 Data Recovery at Four Archaeological Sites on Brownlee Reservoir

BLM agrees that IPCBD-97-03 is an eligible archaeological site being adversely impacted by project operations. If protection/stabilization in place is not possible, then data recovery is indicated as a feasible method of preserving its information value in accordance with the National Historic Preservation Act.

BLM agrees that IPCBD-075 is a potentially eligible site. However, additional historic research is needed because it is not clear from the site record whether or not this is a remnant of the Goodell wagon road, or if the road has sufficient integrity and visibility. If this is an emigrant road, the property would be eligible at the regional level of significance. In that case, BLM would recommend specific data collection measures to be followed by long term preservation measures and monitoring for condition changes.

BLM agrees that site IPCBD 0080, the Connor Ditch, is an eligible historic site as a component of the historic landscape of the Snake River canyon. It is significant at the local level. BLM would recommend specific data collection measures to be followed by monitoring for condition changes.

E.4.2.5.3 Enhancement Measures: "The goal of each of the following Applicant-proposed measures is to enhance the current state of knowledge about Native Americans, as well as Euro-and-Asian-American settlers, in the Hells Canyon area."

BLM agrees that the development of interpretive sites on Oxbow, Hells Canyon, and Brownlee reservoirs would enhance public understanding of the history and current use of the Hells Canyon area and should facilitate heritage stewardship. If BLM lands or resources are involved or adjacent to the locations selected for interpretive site development, BLM would need to either participate and concur or be consulted regarding the development, the interpretive message, and the indirect effects of siting this type of development.

E.4.2.5.3.6 through E.4.5.3.10.1 Native American Programs

In this Exhibit E.4, funding for Native American Programs is provided at a level of \$1,000,000 for the 30 year term of the license, for each of the six tribal governments listed. However, in the Cultural Resource Management plan (Technical Report E.4-15), the same enhancement measure is depicted with very different funding levels - most notably, four tribal governments are funded for \$1,000,000; while the Shoshone-Paiute and Shoshone-Bannock are funded for less at \$502,500. This discrepancy between the Exhibit E.4 and Technical Report E.4-15 needs to be resolved. BLM wonders why the Joseph Band of the Nez Perce is apparently not included in this enhancement measure.

E.4.2.5.3.11 Additional Section 106 Projects

This section should be revised to acknowledge that additional Section 106 review would be through an agreement between the Applicant, federal land agencies and the Idaho and Oregon SHPOs. Section 106 consultation between BLM and Idaho and Oregon

SHPOs is currently under the provisions of state protocols implementing the BLM National Programmatic Agreement.

Regardless of when a new license might be issued, the ongoing adverse effects from present project-related impacts on archaeological sites and historic properties need to be assessed and mitigated.